REMARKS

Claims 1, 2, 5-19, 21, 22, 24-40, 42 and 43 are pending in the application. Claims 1, 2, 5-19, 21, 22, 28-40, 42 and 43 are rejected. Claims 6, 7, 24-27 are objected to. Claim 6 is cancelled and claims 7 and 24 are amended for clarity. Claim 19 is amended for clarity, and is supported by the specification at least at page 25, lines 7-11. Claim 26 and page 19 of the specification are amended to correct a typographical error. Applicant respectfully requests reconsideration of the application in view of the foregoing amendments and the following remarks.

This Amendment is properly submitted under 37 C.F.R. §1.116 because the amendment does not present any new claims; the claim amendments do not raise new issues or introduce new matter; certain claim amendments are in response to objections first raised in the Office Action of August 4, 2003; the arguments submitted are in response to issues first raised in the Office Action issued August 4, 2003, or in the telephonic interview of October 22, 2003; and the amendments and arguments place the application in condition for allowance, or in better condition for appeal, should an appeal be necessary. Reconsideration of the application in view of the above amendments and following remarks is thus respectfully requested.

Applicants thank Examiner Aughenbaugh for the reconsideration and withdrawal of various objections and rejections. Applicants further thank Examiner Aughenbaugh for the telephonic interview granted Applicants' representative on October 22, 2003. During the interview, the primary reference Maier et al. (U.S. Pat. 5,275,854) was discussed. Applicants' representative offered to provide evidence of unexpected results to overcome Maier et al., but no consensus was reached between Applicants' representative and Examiner Augenbaugh as to whether such evidence might overcome the rejections of record. Applicants herein present their arguments and evidentiary support in full, and submit the claims are in condition for allowance for at least the reasons presented herein.

Rejection of Claims 6, 7, and 24-27 under 37 CFR 1.75(c):

Claims 6, 7, and 24-27 were objected to under 37 CFR 1.75(c), as being of improper dependent form. Claim 6 is herein canceled, and the dependency of

claim 7 and claim 24 is amended. Reconsideration and withdrawal of the rejection are in order.

Rejection of Claims 1, 2, 5-7, 9-16, 21, 22, 28-35 and 39 under 35 U.S.C. 102(b)

Claims 1, 2, 5-7, 9-16, 21, 22, 28-35 and 39 are rejected under 35 U.S.C. 102(b) as allegedly anticipated by Maier et al. The Office Action indicates Maier et al. teaches a shaped article such as a film, sheet, bottle (a container), tube, fiber or rod having a continuous first polymer phase having dispersed therein microbeads of a crosslinked second polymer that are bordered by void space, wherein the crosslinked second monomer can be acrylic acid, methyl acrylate or methyl methacrylate (col. 7, lines 47-52 and Examples 15-18 and 23-26 and col. 17, lines 35-45). It is asserted in the Office Action that, because Maier et al. discloses microbeads of a composition claimed by Applicant, the microbeads of Maier et al. have the same thermal stability "in the absence of objective and convincing evidence to the contrary." Applicants respectfully traverse the rejection for at least the following reasons.

The assertion in the Office Action that the microbeads of Maier et al. have the same thermal stability as those in Applicants' claimed invention is flawed, as indicated in the telephone conference of October 22, 2003. Maier et al. teach a broad recitation of possible monomers at col. 7, lines 13-56. There is no teaching of how to choose one or more monomers to form a microbead with a specific thermal stability for use in a shaped article or thermal transfer receiving sheet, as claimed by Applicants. Maier et al. does not even address thermal stability of the microbeads, and therefore does not recognize the problem of thermal stability in various formulations of microbeads. Maier et al. also does not recognize the problem of yellowness in the microbeads, or the resultant shaped article or thermal transfer receiving sheet, under exposure to UV light.

Maier et al. does not disclose an amount of crosslinker to be used in forming the microbeads. The examples of Maier et al. demonstrate an amount of 5% or 30% crosslinker. The formulations containing methylmethacrylate monomer and 5% of divinylbenzene as a crosslinker, according to the Office Action, are deemed to fall within Applicants' claims. However, decreasing amounts of crosslinker provide reduced thermal stability, as shown in the attached Declaration of inventor Dennis E.

Smith, and in Table 6 of Applicants' specification, pages 23-34. As shown in the Declaration, the formulations of Maier et al. with 5% crosslinker do not provide Applicants' claimed thermal stability, but would result in a 2% weight loss at a temperature less than 260°C.

As shown in Applicants' specification in Tables 4 and 5 on pages 22 and 23, it is difficult to predict what amount of a specific crosslinking monomer will produce a desired thermal stability. For example, in Table 4, numerous examples having 30% crosslinking monomer are within Applicants' claimed thermal stability, while another crosslinking monomer at 30%, diethylene glycol diacrylate, is outside the claimed thermal stability. Applicants have recognized thermal stability and yellowness as problems in the area of shaped articles and thermal transfer receiving sheets, and have identified a criterium for forming such shaped articles and thermal transfer receiving sheets. The criterium for achieving the desired properties of yellowness and thermal stability is selection of microbeads having less than 10 wt % styrenic monomers and a 2% weight loss at a temperature above 270°C.

Maier et al. does not disclose shaped articles or thermal receiver sheets comprising microbeads having a low yellowness (less than 10 wt% styrenic monomers) and a thermal stability of a 2% weight loss above 270°C. Maier et al. does not recognize the problem of thermal stability, or teach the selection of acrylic or allylic crosslinking monomers, to overcome the problems of thermal stability and yellowness. Applicants have shown, in the attached Declaration of Dennis E. Smith, and in the specification, the unexpected results of improved thermal stability and decreased yellowness achieved with the claimed invention, which problems are not taught, suggested, or resolved in Maier et al. For at least the above reasons, reconsideration and withdrawal of the rejection are in order.

Rejection of Claims under 35 USC §103(a):

Claims 18, 19, 37, and 38 are rejected under 35 U.S.C. §103(a) as allegedly obvious over Maier et al. for reasons set forth above in the rejection under 35 U.S.C. §102(b). It is asserted in the Office Action that the concentration of crosslinking agent necessary to obtain a desired result can be determined by routine experimentation.

Claim 8 is rejected under 35 U.S.C. §103(a) over Maier et al. in view of Saito et al.

Claims 17, 36, 42, and 43 are rejected under 35 U.S.C. §103(a) over Maier et al. in view of Harrison et al.

Claim 40 is rejected under 35 U.S.C. §103(a) over Maier et al. in view of Hart et al.

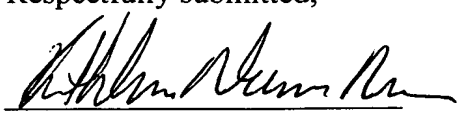
Applicants traverse each of the above rejections under 35 U.S.C. §103(a) over Maier et al., alone or in combination with a secondary reference, for at least the following reasons.

As stated above with regard to the rejection over Maier et al. under 35 U.S.C. §102(b), Maier et al. does not disclose shaped articles or thermal transfer receiving sheets with microbeads having a thermal stability of a 2% weight loss above 270°C. Maier et al. does not recognize the problem of thermal stability, or teach the selection of acrylic or allylic crosslinking monomers to overcome the problem of thermal stability. Maier et al. further does not recognize the problem of yellowness. As shown in Applicants' specification, yellowness (Table 1) can be reduced by decreasing the amount of styrenic monomers. Thermal stability decreases as the amount of crosslinking monomer is decreased, as shown in Table 6. However, how the specific amount of the chosen crosslinking monomer effects the thermal stability cannot be predicted, as shown in Tables 4 and 5. Thus, an amount of acrylic or allylic crosslinking monomer which would be expected to provide desired thermal stability cannot be specified *a priori*.

Applicants have shown, in the attached Declaration of Dennis E. Smith, and in the specification, the unexpected results of improved thermal stability and decreased yellowness achieved with the claimed invention, which problems are not taught, suggested, or resolved in Maier et al., or in the secondary references of Saito et al., Harrison et al., or Hart et al. Absent Applicants' claimed invention, both yellowness control and thermal stability can not successfully be achieved by routine experimentation without undo trial and error. Applicants have determined and claim criteria which produce both satisfactory yellowness and thermal stability. For at least the above reasons, reconsideration and withdrawal of the rejections under 35 U.S.C. §103(a) are in order.

It is respectfully submitted, in view of the above amendments and remarks, that this application is now in condition for allowance, prompt notice of which is earnestly solicited. Should the Examiner have any questions, the Examiner is invited to contact Applicants' undersigned representative.

Respectfully submitted,



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